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REMARKS

Upon receipt of this response, the Examiner is respectfully requested to contact the undersigned representative of the Applicant to arrange a telephone interview concerning the inventive merits of this application.

The Applicant thanks the Examiner for indicating that claims 42 and 63-66 are allowed. With respect to the remaining claims, the following comments are submitted concerning the allowability of those claims.

Claim 52 is rejected, under 35 U.S.C. § 102, as being anticipated in view of Lee '639 (United States Patent No. 4,377,639). The Applicant acknowledges and respectfully traverses the raised anticipatory rejection in view of the following remarks.

Lee '639 relates to a tissue culture device for mass cell culture. The culture apparatus 10 includes a horizontally disposed cylindrical body 11 having an input port 21 and output port 22 located in the wall of the cylindrical body 11. A first open end of the cylindrical body 11 is enclosed by a cap 12 and the second open end of the cylindrical body 11 is enclosed by a cap 13. These caps 12, 13 screw onto the cylindrical body 11 and support a culture disc holder 16. A ring seal 29 extends about the interior periphery of the cap 12 to provide a fluid tight seal between the end cap 12 and the first open end of the cylindrical body 11. A similar ring seal 29 is provided for the second cap 13 at the opposite end of the cylindrical body 11. As seen in Fig. 1 of Lee '639, these seals 29 are sandwiched between the axial ends of the cylindrical body 11 and the disk like interior face of the caps 12, 13. It is respectfully submitted that the culture device taught by Lee '639 is distinctly different from the device as currently claimed.

In particular, amended claim 52 includes the limitation of having at least one resilient lateral tensioning ring that encircles both the exterior surface of the base receptacle and the exterior surface of the upper lid such that the sealing engagement between the upper lid and the base receptacle is retained when the container-like receptacle is rotated about its transverse axis. In short, the tensioning ring wraps around and surrounds the exterior of the receptacle to maintain the upper lid and the base receptacle in engagement with one another. It is respectfully submitted that such a tensioning ring, as presently claimed, is clearly not taught, suggested, disclosed or remotely hinted at by Lee '639. As such, the raised rejection in view of Lee '639 should be withdrawn at this time.

Next, claims 53, 56, 67 and 68 are rejected, under 35 U.S.C. § 103, as being unpatentable over Christian et al. '791 (United States Patent No. 5,267,791) in view of Winston '354 (United States Patent No. 4,851,354). The Applicant acknowledges and respectfully

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traverses the raised obviousness rejection in view of the above amendments and the following remarks.

As previously discussed, claim 67 was previously amended to more explicitly and clearly recite the fundamental distinctions between the invention and the prior art. In particular, claim 67 is directed to a device for raising or cultivating cells in a container-like receptacle that includes a base and at least one lid wherein the lid is connected to the receptacle in a pressure-tight manner and the receptacle or the lid is provided with at least one inlet bore 8 for one of the introduction and withdrawal of culture medium and oxygen. As also recited in claim 67, the receptacle 1 is provided with a pressurizing means that is located within the receptacle 1 for exerting pressure internally on the cells 7. Christian et al. '791 only relates to a receptacle having a single, upper lid and thereby, in complete contrast from the invention as recited in claim 67, does not teach, suggest, disclose or hint at a receptacle having upper and lower lids or ends and does not teach, suggest, disclose or hint at a receptacle having input and output bores in the upper and lower lids or ends, as presently claimed.

In addition, and as expressly conceded by the Examiner, Christian et al. '791 does not teach, suggest, disclose or remotely hint at any form of means to provide pressure in the cell growth receptacle, much less any form of pressure apparatus located within the cell growth receptacle. It is therefore apparent, and the Applicant's belief and position, that Christian et al. '791 does not teach, suggest, disclose or hint at any aspect or element of the present invention, as recited in claims 53, 56, 67 and 68, to those of ordinary skill in the relevant arts under the requirements and provisions of 35 U.S.C. 103.

Winston '354 is cited in combination with Christian et al. '791 for its alleged teaching of having a pressurizing means to exert pressure on the cell. It is respectfully submitted that Winston '345 more specifically teaches an apparatus having a compliant base 21 on which cells may be grown. Below this compliant base 21 is a reservoir 30 which is pressurized "causing the base to deform into a spherical cap which imparts a substantially uniform biaxial strain to all of the attached cells" (column 3, lines 36-37). In other words, the applied positive or negative pressure deforms the base and causes each cell to either push or pull on laterally adjacent cells, which laterally strains the cells only in two dimensions ("biaxial"). It is respectfully submitted that the teaching and disclosure of Winston '354 are distinct from the presently claimed invention in which the pressurizing means exerts pressure, three dimensionally, on the cells. As such, the raised rejection in view of Christian et al. '791 in combination with Winston '354 should be withdrawn at this time in view of the forgoing.

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Lastly, claim 54 is rejected, under 35 U.S.C. § 103, as being unpatentable over Christian et al. '791 in view of Winston '354 and further in view of Hung '625 (United States Application Publication No. 2002/0106625). The Applicant acknowledges and respectfully traverses the raised obviousness rejection in view of the above amendments and the following remarks.

The Applicant acknowledges that the additional reference of Hung '625 may arguably relate to the feature indicated by the Examiner in the official action. Nevertheless, the Applicant respectfully submits that the combination of the base references of Christian et al. '791 and Winston '354 with this additional art of Hung '625 still fails to in any way teach, suggest or disclose the above distinguishing features of the presently claimed invention. As such, all of the raised rejections should be withdrawn at this time in view of the above amendments and remarks.

If any further amendment to this application is believed necessary to advance prosecution and place this case in allowable form, the Examiner is courteously solicited to contact the undersigned representative of the Applicant to discuss the same.

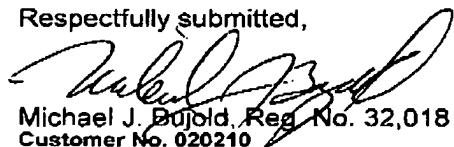
In view of the above amendments and remarks, it is respectfully submitted that all of the raised rejections should be withdrawn at this time. If the Examiner disagrees with the Applicant's view concerning the withdrawal of the outstanding rejections or applicability of the Lee '639, Christian et al. '791 and/or Hung '625 references, the Applicant respectfully requests the Examiner to indicate the specific passage or passages, or the drawing or drawings, which contain the necessary teaching, suggestion and/or disclosure required by case law. As such teaching, suggestion and/or disclosure is not present in the applied references, the raised rejection should be withdrawn at this time. Alternatively, if the Examiner is relying on his/her expertise in this field, the Applicant respectfully requests the Examiner to enter an affidavit substantiating the Examiner's position so that suitable contradictory evidence can be entered in this case by the Applicant.

In view of the foregoing, it is respectfully submitted that the raised rejections should be withdrawn and this application is now placed in a condition for allowance. Action to that end, in the form of an early Notice of Allowance, is courteously solicited by the Applicant at this time.

The Applicant respectfully requests that any outstanding objection(s) or requirement(s), as to the form of this application, be held in abeyance until allowable subject matter is indicated for this case.

In the event that there are any fee deficiencies or additional fees are payable, please charge the same or credit any overpayment to our Deposit Account (Account No. 04-0213).

Respectfully submitted,



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